

ABSTRACT

A new optical switch device and method of operating such a device overcomes alignment problems through the use of an optical signal-confining channel that may be embedded so as to confine optical signals in a desired propagation path such that the optical signal's alignment with the output is secured. Small-angle mirrors may be used so as to direct the optical signal into the intended optical signal-confining channels so as to achieve the desired optical switching. The mirrors could be latching micro-mirrors or non-latching micro-mirrors. Such mirrors could be controlled by electrostatic actuation, thermal actuation or electromagnetic actuation, or any other technique.